

SEQUENCE LISTING

<110> GROGER, HARALD  
WERNER, HELGE  
ALTENBUCHNER, JOSEF  
MENZEL, ANNE  
HUMMEL, WERNER

<120> PROCESS FOR PREPARING OPTICALLY ACTIVE AMINO ACIDS USING A  
WHOLE-CELL CATALYST

<130> 294227US-10757-9350-0-X PCT

<140> 10/593,567  
<141> 2006-09-20

<150> PCT/EP2005/002933  
<151> 2005-03-18

<150> DE 102004014280.7  
<151> 2004-03-22

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<170> PatentIn version 3.5

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tat gat tat gag caa gta gta ttt tgt caa gat aaa gaa tct ggt tta
Tyr Asp Tyr Glu Gln Val Val Phe Cys Gln Asp Lys Glu Ser Gly Leu 100
      15          20                   25

aaa gca att att gca att cat gat aca aca ctt gga ccg gct ctt ggt
Lys Ala Ile Ile Ala Ile His Asp Thr Thr Leu Gly Pro Ala Leu Gly 148
      30          35                   40

gga aca aga atg tgg aca tat gat tct gaa gaa gcg gct att gaa gat
Gly Thr Arg Met Trp Thr Tyr Asp Ser Glu Glu Ala Ala Ile Glu Asp 196
      45          50                   55

gca ttg cgt ctt gca aaa ggg atg aca tac aaa aac gca gca gct ggt
Ala Leu Arg Leu Ala Lys Gly Met Thr Tyr Lys Asn Ala Ala Ala Gly 244
      60          65                   70                   75

tta aac tta ggt ggt gcg aaa aca gta att atc ggt gat cct cgt aaa
Leu Asn Leu Gly Gly Ala Lys Thr Val Ile Ile Gly Asp Pro Arg Lys 292
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gat aag aqc qaa gca atg ttc cgt gca cta gga cgt tat atc caa gga

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Leu Asn Gly Arg Tyr Ile Thr Ala Glu Asp Val Gly Thr Thr Val Asp			
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Pro Ser Phe Gly Ser Ser Gly Asn Pro Ser Pro Val Thr Ala Tyr Gly			
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His Leu His Ala Glu Gly Ala Lys Leu Ile Val Thr Asp Ile Asn Lys  
195 200 205

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210 215 220

Pro Asn Glu Ile Tyr Gly Val Glu Cys Asp Ile Tyr Ala Pro Cys Ala  
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245 250 255

Val Ile Ala Gly Ser Ala Asn Asn Gln Leu Lys Glu Asp Arg His Gly  
260 265 270

Asp Ile Ile His Glu Met Gly Ile Val Tyr Ala Pro Asp Tyr Val Ile  
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305 310 315 320

Lys Val Ile Glu Ile Ser Lys Arg Asp Gly Ile Ala Thr Tyr Val Ala  
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 Glu Glu Lys Leu Tyr Gly Ser Thr Glu Asn Lys Leu Gly Ile Ala Asn  
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 Trp Leu Lys Asp Gln Gly His Glu Leu Ile Thr Thr Ser Asp Lys Glu  
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 Gly Glu Thr Ser Glu Leu Asp Lys His Ile Pro Asp Ala Asp Ile Ile  
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 Ile Thr Thr Pro Phe His Pro Ala Tyr Ile Thr Lys Glu Arg Leu Asp  
 65 70 75 80  
  
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 85 90 95  
  
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 His Ile Asp Leu Asp Tyr Ile Asn Gln Thr Gly Lys Lys Ile Ser Val  
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 Asp Ile Glu Gly Lys Thr Ile Ala Thr Ile Gly Ala Gly Arg Ile Gly  
 165 170 175  
  
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 Tyr Arg Val Leu Glu Arg Leu Leu Pro Phe Asn Pro Lys Glu Leu Leu  
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25

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Trp Leu Lys Asp Gln Gly His Glu Leu Ile Thr Thr Ser Asp Lys Glu  
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50 55 60

Ile Thr Thr Pro Phe His Pro Ala Tyr Ile Thr Lys Glu Arg Leu Asp  
65 70 75 80

Lys Ala Lys Asn Leu Lys Leu Val Val Val Ala Gly Val Gly Ser Asp  
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His Ile Asp Leu Asp Tyr Ile Asn Gln Thr Gly Lys Lys Ile Ser Val  
100 105 110

Leu Glu Val Thr Gly Ser Asn Val Val Ser Val Ala Glu His Val Val  
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Met Thr Met Leu Val Leu Val Arg Asn Phe Val Pro Ala His Glu Gln  
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Asp Ile Glu Gly Lys Thr Ile Ala Thr Ile Gly Ala Gly Arg Ile Gly  
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Tyr Arg Val Leu Glu Arg Leu Leu Pro Phe Asn Pro Lys Glu Leu Leu  
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Tyr Tyr Asp Tyr Gln Ala Leu Pro Lys Glu Ala Glu Glu Lys Val Gly  
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Ala Arg Arg Val Glu Asn Ile Glu Glu Leu Val Ala Gln Ala Asp Ile  
210 215 220

Val Thr Val Asn Ala Pro Leu His Ala Gly Thr Lys Gly Leu Ile Asn  
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Lys Glu Leu Leu Ser Lys Phe Lys Lys Gly Ala Trp Leu Val Asn Thr  
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Ala Arg Gly Ala Ile Ala Val Ala Glu Asp Val Ala Ala Ala Leu Glu  
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Ser Gly Gln Leu Arg Gly Tyr Gly Gly Asp Val Trp Phe Pro Gln Pro  
275 280 285

Ala Pro Lys Asp His Pro Trp Arg Asp Met Arg Asn Lys Tyr Gly Ala  
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Gly Asn Ala Met Thr Pro His Tyr Ser Gly Thr Thr Leu Asp Ala Gln  
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Thr Arg Tyr Ala Glu Gly Thr Lys Asn Ile Leu Glu Ser Phe Phe Thr  
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